

**In the Claims**

Claims 1-70 (cancelled)

71. (New) A method of stimulating growth of stromal cells in a human, the method comprising the step of administering to the human an effective amount of a human stem cell factor (SCF) polypeptide and optionally a pharmaceutically acceptable carrier.

72. (New) The method of claim 71 wherein the stem cell factor polypeptide is selected from a group consisting of amino acids 1-162, 1-164, and 1-165 as set out in Figure 15C, said polypeptide optionally consisting of an N-terminal methionine.

73. (New) The method of claim 71 wherein the stem cell factor polypeptide is selected from a group consisting of amino acids 1-100, 1-110, 1-120, 1-123, 1-127, 1-130, 1-133, 1-137, 1-141, 1-145, 1-148, 1-152, 1-156, 1-157, 1-158, 1-159, 1-160, 1-161, 1-163, 1-166, 1-168, 1-173, 1-178, 2-164, 2-165, 5-164, 11-164, 1-180, 1-183, 1-185, 1-188, 1-189, 1-220, and 1-248 as set out in Figures 42A-C, said polypeptide optionally consisting of an N-terminal methionine.

74. (New) The method of claim 71 wherein the stem cell factor polypeptide is selected from a group consisting of amino acids 1-152, 1-157, 1-160, 1-161, and 1-220 as set out in Figure 44A-C, said polypeptide optionally consisting of an N-terminal methionine.

75. (New) The method of claim 71 wherein the stem cell factor is covalently conjugated to a water-soluble polymer.

76. (New) The method of claim 75 wherein the water-soluble polymer is polyethylene glycol.

77. (New) The method of claim 72, 73, or 74 wherein the stem cell factor is co-administered with at least one other cytokine.

78. (New) The method of claim 77 wherein one or more cytokines are selected from a group consisting of IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, EPO, G-CSF, M-CSF, GM-CSF, IGF-1, and LIF.

79. (New) The method of claim 75 wherein the stem cell factor is co-administered with at least one other cytokine.

80. (New) The method of claim 79 wherein the cytokine is selected from a group consisting of IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, EPO, G-CSF, M-CSF, GM-CSF, IGF-1, and LIF.

81. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

82. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

83. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

84. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for pulmonary delivery.

85. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for nasal delivery.

86. (New) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

87. (New) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

88. (New) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

89. (New) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for pulmonary delivery.